Cont a2

5. (Amended) The vesicle according to claims 2, 3 or 4, in which said recombinant class II molecule of the major Histocompatibility complex is chosen from among the serotypes DR1, DR2, DR3, DR4, DR5, DR6, DR7, DR8, DR9, DR10, DR11, DR12 and DR13.

6. (Amended) The vesicle according to claim 1, in which said recombinant molecule of the major Histocompatibility complex is a class I molecule.

7. (Amended) The vesicle according to claim 1, further comprising a complex between a defined peptide and said recombinant molecule of the major Histocompatibility complex.

8. (Amended) The vesicle according to claim 1, which further comprises one or more heterologous molecules of interest.

9. (Amended) The vesicle according to claim 1, which further comprises a peptide or a recombinant protein enabling its purification.

10. (Amended) The vesicle according to claim 1, which further comprises a tracer.

11. (Amended) The vesicle according to claim 1, which is essentially free of molecules of the endogenous MHC.

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12. (Amended) A membrane vesicle that is obtained from a mastocyte or mastocyte derived cell, comprising one or more heterologous molecules of interest.

13. (Amended) The vesicle according to claim 12, in which said heterologous molecule of interest is a protein, a polypeptide, a peptide, a nucleic acid, a lipid, or a substance of chemical, biological or synthetic nature.

14. (Amended) The membrane vesicle according to claim 12, in which said heterologous molecule is one or more molecules selected from the group consisting of a molecule of the major Histocompatibility complex, an antigen, a receptor ligand, a ligand receptor, a nucleic acid, a pharmacological product, a tracer, or a purification peptide.

Cont A2

15. (Amended) The vesicle according to claim 14, in which said heterologous molecule is a ligand receptor, and which further comprises another heterologous molecule of interest.

16. (Amended) A membrane vesicle that comprises a recombinant fusion molecule between a polypeptide of interest and a signal sequence.

17. (Amended) An exosome-producing cell, comprising one or more recombinant nucleic acids coding for a molecule of the major Histocompatibility complex.

18. (Amended) The cell according to claim 17, in which said cell is a mastocyte cell.

19. (Amended) The cell according to claim 18, in which said mastocyte cell is derived from a mastocyte line of a basophilic leukemia.

20. (Amended) The cell according to claim 17, in which said molecule is one or more of an MHC class I molecule, or an MHC class II α or β chain molecule.

21. (Amended) A method for producing an exosome containing a defined recombinant molecule, comprising steps of:

culturing a mastocyte or mastocyte-derived cell containing a recombinant nucleic acid coding for said defined recombinant molecule; and

recovering the exosomes produced by said cells, these exosomes containing said defined recombinant molecule.

22. (Amended) The method according to claim 21, further comprising the step of stimulating said cells to induce or increase, or both, the secretion of exosomes.

23. (Amended) The method according to claim 21, in which said defined recombinant molecule is exposed outside the exosome, or is included, wholly or in part, in the cytosolic fraction of the exosome.

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24. (Amended) The method according to claim 21, in which said recombinant molecule is a molecule of the major Histocompatibility complex, an antigenic molecule, a receptor ligand, a ligand receptor, a purification peptide, or any other polypeptide of interest.

25. (Amended) The method according to claim 21, in which said nucleic acid also comprises a region encoding a membrane-specific signal sequence.

26. (Amended) A method for preparing an exosome containing a peptide-MHC complex of defined composition, comprising the steps of:

culturing an exosome-producing cell containing one or more recombinant nucleic acids coding for a defined recombinant molecule of the MHC;

stimulating said cells to induce release of the exosomes;

recovering said exosomes produced by said cells, these exosomes expressing on their surface said defined recombinant molecule of the MHC; and

placing the exosomes in contact with the peptide or peptides.

27. (Amended) A method for preparing an exosome containing a peptide-MHC complex of defined composition, comprising the steps of:

culturing an exosome-producing cell containing one or more recombinant nucleic acids coding for a defined recombinant molecule of the MHC and a nucleic acid containing a region coding for a defined recombinant peptide;

stimulating said cells to induce release of the exosomes; and

recovering said exosomes produced by said cells, these exosomes expressing on their surface said defined recombinant molecule of the MHC associated with said recombinant peptide.

28. (Amended) The method according to ~~claim~~ 27, in which said nucleic acid coding for the recombinant peptide codes for a derivative of the li invariant chain, in which the CLIP region has been deleted and substituted by said peptide.

29. (Amended) The method according to claim 26 or 27, in which said producer cell is a mastocyte or mastocyte-derived cell.

30. (Amended) The method according to claim 26 or 27, in which said producer cell is essentially free of molecules of the endogenous MHC.

31. (Amended) A method for modifying the composition of an exosome, comprising the steps of:

inserting into an exosome-producing cell a nucleic acid coding for a defined molecule, and a signal sequence targeting cellular membrane compartments; and

recovering exosomes from said cell.

32. (Amended) A composition containing one or more membrane vesicles according to claim 1, 12, or 16.

33. (Amended) A method of using the vesicle of claim 1, 12, or 16 for the production of polyclonal antibodies or monoclonal antibodies or both.

34. (Amended) A method for producing antibodies, comprising immunizing an animal with a vesicle according to claim 1, and recovering the antibodies or cells producing antibodies or involved in the immunity response, or both.

35. (Amended) The method according to claim 34, in which said antibodies are monoclonal antibodies.

36. (Amended) A method of using an antibody obtained according to claim 34, or of a fragment of said antibody, for the detection, in a biological sample, of the presence of corresponding specific antigens.

37. (Amended) A method of using an antibody produced according to claim 34, or a fragment of said antibody, or of a membrane vesicle that comprises a recombinant molecule of the human major Histocompatibility complex for the preparation of a therapeutic composition intended to inhibit the interaction between the receptor of a T-lymphocyte and the MHC-peptide complex for which it is specific.

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38. (Amended) A method of using a membrane vesicle according to claim 1, 12, or 16 for the detection of partners specific for a protein molecule in a biological sample.

39. (Amended) The method of claim 38, in which said membrane vesicle carries a MHC-peptide complex for the detection of T-lymphocytes specific to this complex in a biological sample.

40. (Amended) The method of claim 38, in which said membrane vesicle carries a TcR receptor for the detection of peptide-MHC complexes specific to this receptor in a biological sample.

41. (Amended) The method of claim 38, in which said membrane vesicle carries a ligand receptor for the detection of the presence of said ligand in a biological sample.

42. (Amended) A method for the detection of the presence of T-lymphocytes specific to antigen-MHC complexes in a biological sample, comprising placing said sample in contact with an exosome labelled according to claim 51, containing said antigen-MHC complex, and evidencing the labelling of T-lymphocytes in said sample.

43. (Amended) A method of using the vesicle according to claim 7 for clonal amplification or *ex vivo* stimulation of T-lymphocytes, or both, wherein said T-lymphocytes are cytotoxic or auxiliary T-lymphocytes, or both.

44. (Amended) A method of using a vesicle according to claim 1, 12, or 16 for the preparation of a composition intended to deliver said molecule to a cell.

45. (Amended) A composition containing one or more exosomes immobilized on a support.

46. (Amended) A method of using a membrane vesicle according to claim 1, 12, or 16, wherein said membrane vesicle is immobilized on a support, for the purification of cells.

Please add the following new claims:

47. (New) The vesicle according to claim 5, in which said serotype is selected from the group consisting of DR1, DR2, DR3, DR4, DR5, DR6, and DR7.

48. (New) The method of claim 35, in which said monoclonal antibodies are specific for the MHC-peptide association.

49. (New) The cell of claim 19, in which said cell is derived from an RBL cell line.

50. (New) The cell of claim 49, in which said RBL cell line is RBL-2H3.

51. (New) The complex of claim 7, wherein said defined peptide is an antigen.

Please refer to the attachment for the marked-up version of the amended claims, pursuant to revised 37 C.F.R. 1.121(c).

REMARKS

The above amendment to the claims has been made to place the application in better condition for examination. In the event that any fees are due in connection with this paper, please charge undersigned's Deposit Account No. 50-1067.

Respectfully submitted,

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